In Audibertia, a section of the genus *Salvia* confined to arid southwestern North America, Dr. Epling recognizes eighteen species which he treats under five sections. Three of these, *Greeneostachys, Jepsonia,* and *Parishiella,* are new; two, *Echinosphace* and *Pycnosphace,* reduced from the sectional rank given by Bentham. One new subspecies, *Salvia carnosa* subsp. *Gilmani,* and twelve new hybrids are described. The distribution of each species is shown by a map and the habit and floral characters of each beautifully illustrated by a full page plate. The introduction includes a discussion of the distribution and habitats of the species of the section and their relation to the shrub formations of the Colorado Desert and the coastal plain and foothill region of southern and central California. Because of the interchanging of blocks of characters in the species throughout the section a hybrid origin is postulated for the group; the species show no evidence of a monophyletic origin. The subsections are segregated mainly upon stamineal and other floral characters; habit and leaf characters have also proved useful. This conservative and competent revision is the result of ten years of field work and herbarium study on the part of the author, and is a worthy successor to his many valuable contributions to the taxonomy of the Labiatae. It is one of seven important botanical papers appearing in the current issue of the "Annals" which is dedicated to Dr. Jesse More Greenman, Curator of the Herbarium of the Missouri Botanical Garden, and which was prepared in honor of his seventieth birthday by a group of his former students.—E. Crum.

A Revision of the Genus Lomatium. By Mildred E. Mathias. Annals of the Missouri Botanical Garden. Volume XXV, Number 1. Pp. 225–297. St. Louis, February, 1938.

This largest and perhaps most difficult of West American umbelliferous genera is interpreted as consisting of 63 species and 20 varieties. Two species and two varieties are described as new. A conservative point of view has been maintained throughout the treatment, despite the superabundance of names and the frequent paucity of available specimens of some units. The appearance of the publication, in itself, should stimulate collectors working in regions immediately concerned to obtain adequate material for the solution of the few problems and the filling of occasional gaps in distribution which still remain.

One notes, gratefully, that the key does not rely unduly upon the number of oil tubes in the fruit for the separation of species and varieties, but that vegetative, floral and habital characters as well as geographical ranges are used to facilitate identification. The species are clear-cut and in the great majority of cases present a logical distribution pattern which conforms with that in other large genera whose taxonomy and distribution have been

studied. Species of narrowly restricted range occur only in such areas as are suspected, on other evidence, of possessing endemic floras. Many of the "one-specimen species" have been found to fit snugly into groups of wider occurrence.

In previous papers, the author has shown a preference for the generic name *Cogswellia* Spreng., both because of the questionable identity of the type species of *Lomatium* Raf. (which antedates it by one year) and the close similarity of the latter name to *Lomatia* R. Br. of the Proteaceae. The present manuscript was written with the intention of retaining *Cogswellia,* but a hurried poll of available authorities on nomenclature, taken at the suggestion of the editor, necessitated a last-minute substitution of *Lomatium.* Now that all the transfers have been made to *Lomatium,* it is to be hoped that this interpretation of the International Rules of Nomenclature will be upheld.

One can readily recognize in the treatment the background of the author's extensive knowledge of the Umbelliferae and her unusually broad field experience with the family. Because of the thoroughness and practicality of the treatment, one awaits with interest the appearance of revisions of other troublesome genera of this family.—L. Constance.

Plants of Zion National Park. By Clifford Presnall and Pauline Mead Patraw. Zion-Bryce Museum Bulletin No. 1. Zion-Bryce Natural History Association in cooperation with the National Park Service. June, 1937. Pp. 1–69 with 15 plates and 15 text figures. Paper. $.50.

A brief synoptical treatment of the common flowering plants and ferns of Zion National Park. The common names are emphasized in accordance with the intended popular appeal. The work consists of a list of over five hundred of the known species of the Park. In most cases a brief statement of characters or habitat accompanies the names. There are no formal descriptions or keys. The illustrations are line drawings and photographs. The printing is by the offset process.—Herbert L. Mason.

Die Bedeutung der Polyploidie für die Verbreitung der Angiospermen, erläutert an den Arten Schleswig-Holsteins, mit Ausblicken auf andere Florengebiets. By G. Tischler. Bot. Jahrb. Band LXVII, Heft 1. Pp. 1–36. Leipzig. 1935.

The chromosome numbers of 66.7 per cent of the species of angiosperms of Schleswig-Holstein are recorded, and 44.1 per cent are found to be polyploid. Families rich in polyploids are the Polygonaceae, Rosaceae, Malvaceae, Rubiaceae, Gramineae, and Cyperaceae, while the Leguminosae and Umbelliferae have relatively few such species. Of the circumpolar types found in this province, 60 per cent are polyploid, while of those of a more southerly range than the area investigated, only 27.1 per cent